AMENDMENTS TO THE CLAIMS

Please amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled.

The following list of claims is intended to replace all prior versions or listings of claims in the application.

Listing of Claims:

1.   (Cancelled)

2.   (**Currently Amended**) The communication device according to claim [[1]] 5, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

3. - 4. (Cancelled)

5.   (**Currently Amended**) A [[The]] communication device according to claim 4 comprising:
        a first receiver able to receive data frames of a first modulation type;
        a second receiver able to receive data frames of a second modulation type;
        an autodetection module able to automatically detect whether an incoming frame is of the first modulation type or the second modulation type; and
        a physical layer controller able to configure the communication device to operate in a mode of communication selected from a first communication mode, in which the first receiver is configured to receive the data frames of the first modulation type, a second communication mode, in which the second receiver is configured to receive the data frames of the second modulation type, and an autodetection mode, in which the autodetection module is to activate either the first receiver or the second receiver, wherein said controller is able to configure said communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device and said prior transmission comprises an outgoing Request To Send frame modulated in one of said first and second modulation types, and wherein the controller is able to configure said communication device to operate in either said first or second communication modes based on the modulation type of said Request To Send frame.

6.   (Previously Presented) The communication device according to claim 5 wherein said communication device is configured to receive a Clear To Send frame in said first or second communication modes based on said Request To Send frame.

7.   (**Currently Amended**) A [[The]] communication device ~~according to claim 4~~ comprising:

a first receiver able to receive data frames of a first modulation type;

a second receiver able to receive data frames of a second modulation type;

an autodetection module able to automatically detect whether an incoming frame is of the first modulation type or the second modulation type; and

a physical layer controller able to configure the communication device to operate in a mode of communication selected from a first communication mode, in which the first receiver is configured to receive the data frames of the first modulation type, a second communication mode, in which the second receiver is configured to receive the data frames of the second modulation type, and an autodetection mode, in which the autodetection module is to activate either the first receiver or the second receiver, wherein said controller is able to configure said communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device and said prior transmission comprises an outgoing data frame modulated in one of said first and second modulation types, and wherein the controller is able to configure said communication device to operate in either said first or second communication modes based on the modulation type of said outgoing data frame.

8.   (Previously Presented) The communication device according to claim 7 wherein said communication device is configured to receive an Acknowledgement frame in said first or second communication modes based on said outgoing data frame.

9. - 10.   (Cancelled)

11.   (**Currently Amended**) A method according to claim [[9]] 13, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

12.   (Cancelled)

13.   **(Currently Amended)** A method ~~according to claim 12,~~ comprising:

receiving an incoming data frame of either a first modulation type or a second modulation type; and

configuring a communication device to operate in a mode of communication selected from a first communication mode, in which a first receiver is configured to receive data frames of the first modulation type, a second communication mode, in which a second receiver is configured to receive data frames of the second modulation type and an autodetection mode, in which an autodetection module, is able to automatically detect whether the incoming data frame is of the first modulation type or the second modulation type and to activate either the first receiver or the second receiver,

wherein configuring comprises configuring the communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device and said prior transmission comprises an outgoing Request To Send frame modulated in one of said first and second modulation types, and wherein configuring comprises configuring said communication device to operate in either of said first or second communication modes based on the modulation type of said Request To Send frame.

14.   (Original) A method according to claim 13, further comprising:

receiving a Clear To Send frame in the modulation type of said Request To Send frame.

15.   **(Currently Amended)** A method ~~according to claim 12,~~ comprising:

receiving an incoming data frame of either a first modulation type or a second modulation type; and

configuring a communication device to operate in a mode of communication selected from a first communication mode, in which a first receiver is configured to receive data frames of the first modulation type, a second communication mode, in which a second receiver is configured to receive data frames of the second modulation type and an autodetection mode, in which an autodetection module, is able to automatically detect whether the incoming data frame is of the first modulation type or the second modulation type and to activate either the first receiver or the second receiver,

wherein <u>configuring comprises configuring</u> the communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device and said prior transmission comprises an outgoing data frame modulated in one of said first and second modulation types, and wherein configuring comprises configuring said communication device to operate in either said first or second communication modes based on the modulation type used to transmit said outgoing data frame.

16.   (Original) A method according to claim 15 further comprising

receiving an Acknowledgement frame in the modulation type of said data frame.

17. - 22. (Cancelled)

23.   **(Currently Amended)** A wireless communication system according to claim [[22]] <u>25</u>, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

24.   (Cancelled)

25.   **(Currently Amended)** A wireless communication system ~~according to claim 24~~ <u>comprising:</u>

<u>a first communication station able to send a data frame transmission; and</u>
<u>a second communication station comprising:</u>
<u>a first receiver able to receive data frames of a first modulation type;</u>
<u>a second receiver able to receive data frames of a second modulation type;</u>
<u>an autodetection module able to automatically detect whether an incoming frame is of the first modulation type or the second modulation type; and</u>
<u>a physical layer controller able to configure the second communication station, based on at least one criterion relating to a prior transmission received or transmitted by the second communication station, to operate in a communication mode selected from a first</u>

communication mode, in which the first receiver is configured to receive the data frames of the first modulation type, a second communication mode, in which the second receiver is configured to receive the data frames of the second modulation type, and an autodetection mode, in which the autodetection module is to activate either the first receiver or the second receiver,

wherein said prior transmission comprises an outgoing Request To Send frame from the second station, in one of said first and second modulation types, wherein the controller is able to configure the second station receiver to operate in either said first or second communication modes based on the modulation type of said Request To Send Frame, and wherein the receiver is able to receive a Clear To Send frame sent by the first station in the modulation type of said Request To Send frame.

26. - 28. (Cancelled)

29.   **(Currently Amended)** The article of claim [[27]] 31, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

30.   (Cancelled)

31.   **(Currently Amended)** An [[The]] article of claim 30 comprising a computer-readable storage medium, having stored thereon instructions that, when executed by a computing platform, result in:

receiving an incoming data frame of either a first modulation type or a second modulation type; and

configuring a communication device to operate in a mode of communication selected from a first communication mode, in which a first receiver is configured to receive data frames of the first modulation type, a second communication mode, in which a second receiver is configured to receive data frames of the second modulation type and an autodetection mode, in which an autodetection module is able to automatically detect whether the incoming data frame is of the first modulation type or the second modulation type and to activate either the first receiver or the second receiver,

wherein <u>the instructions result in configuring the communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device,</u> said prior transmission comprises an outgoing Request To Send frame modulated in one of said first and second modulation types, and wherein configuring comprises configuring said communication device to operate in either of said first or second communication modes based on the modulation type of said Request To Send frame.

32.   **(Currently Amended)** The article of claim [[30]] <u>31</u> wherein said prior transmission comprises receiving a Clear To Send frame in the modulation type of said Request To Send frame.